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EXAMINER

HUTCHINSON, SHAWN R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,386	Applicant(s) TORRES ET AL.	
	Examiner SHAWN R. HUTCHINSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This supplemental action supersedes the one sent 19 March 2008. Editing comments are removed. All elected claims are still treated as originally stated.

Election/Restrictions

2. Applicant's election with traverse of Group 1, Claims 1-24, in the reply filed on 01/09/08 is acknowledged. The traversal is on the ground(s) that a PCT application is permitted to contain claims drawn to "Combinations of Different Categories of Claims". As noted in the office action filed 10 December 2007, Applicant's special technical feature of a composition for forming a fabric was disclosed in prior art, (see Nakanishi, JP 05-186946), and does not represent a contribution to the advancement of the art. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 21 & 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant recites the limitation fibers in the fabric are conjugated ({Applicant} [0083]). Such a term in the art can imply bi- or multi-component fiber. However, the

applicant also recites that said fibers are longer than the fibers in the composition. How does the fabric, which appears to be formed from the composition containing fibers, have longer fibers than the composition?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the U.S.

6. Claims 1, 2, 6, 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Laurent, et al. {Laurent} (EP 0 165 880 A1).

Laurent teaches a sprayable composition to decorate interiors comprising fibers, water (a suitable non-toxic diluent as described by Applicant [0022 | 0050]), and polymer binder ({Laurent} Machine Translation Page 2 | Claims 1-11 | Examples 1-6). Regarding Claims 2 and 6, the binder is a polyvinyl alcohol. Regarding Claim 10, at least 40% cellulose fiber is taught for the compositions. Polyolefin fibers can be substituted for the cellulose fiber, which meets Applicant's limitation of a synthetic fiber of at least 40-% ({Laurent} Page 2). Regarding Claims 11-14, others compositions contain rockwool fibers and synthetic fibers of 82 parts weight to a binder of 100 parts weight ({Laurent} Example 4). Regarding Claim 15, a powdered calcium carbonate is used ({Laurent} Example 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laurent, et al. {Laurent} (EP 0 165 880 A1) in view of Nakanishi (JP 05186949 A).

As discussed above, Laurent teaches a sprayable fiber binder composition comprising fibers to decorate interiors, water diluent, and polymer binder ({Laurent} Machine Translation Page 2 | Claims 1-11 | Examples 1-6). Laurent is silent regarding the specific properties of the composition constituents. Based on the description by Applicant regarding properties of the binder ({Applicant} [0025]), because the binder types taught by Laurent are substantially identical, they would also be expected to have similar glass transition temperatures ({Laurent} Examples 1-6).

At the time of the invention, it would have been obvious to use a sprayable fiber composition and claim properties of constituent materials for the composition for forming

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a fabric {Laurent}. Though unrecognized at the time, the glass transition temperature of a substantially identical material is expected to be the same, and is unpatentable; see *in re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

10. Claims 1-4, 6-15, 17-20, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (JP 05186949 A) in view of O'Connell, et al. {O'Connell} (EP 0 083 960 A1).

Nakanishi teaches a sprayable nonwoven fabric made from fiber and an adhesive ({Nakanishi} Claims 1-3). Spraying a fiber composition into a fabric is useful to form a contoured shape ({Nakanishi} [0002-0004]). Regarding Claims 17-18, Nakanishi teaches a method of forming a fabric from a composition using a device producing a spray of the composition from a container (wherein the extruder is a "container" because it contains the composition) ({Nakanishi} Claim 3 | [0007, 0009 & 0012-0024]). The device is a nozzle. Varying the die size is well within the range of ordinary skill, based on standard processing factors such as viscosity, pressure, and temperature. Regarding Claim 19, the composition is sprayed to form a nonwoven fabric that comprises the fibers bound by the "self-adhesive". Regarding Claim 20, the fibers appear to be substantially parallel with the plane of the fabric by virtue of them being formed onto the plane ({Nakanishi} Fig. 5). Regarding Claim 23, the composition can be formed into a fabric for such an article as shoes ({Nakanishi} Claim 2). Regarding Claim 24, the composition is formed into a cloth ({Nakanishi} [0010]).

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Synthetic fibers are taught [0015], but Nakanishi is silent regarding what constituent in the composition renders the fibers, as he describes, "self-adhesive".

O'Connell teaches a sprayable composition for acoustical applications comprising fibers, water, and a polymer binder ({O'Connell} Pages 4 & 6). Polyvinyl acetate and polyvinyl alcohol are taught as suitable binders to bind the fiber. Regarding Claims 7 & 8, fiber length is about 0.5-mm to about 5-mm ({O'Connell} Page 3). Claim 9 is unpatentable because the range is sufficiently close and there is a reasonable expectation that the fabric would have the same properties based on the similarity of the materials used; see *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Regarding Claim 10, the fibers disclosed by O'Connell comprise 25% to 50% wool and about 3% to about 12% synthetic polyolefin fibers. Regarding Claim 15, dyes are taught as additional additives ({O'Connell} Page 7).

Regarding Claims 3-4, based on the description by Applicant regarding properties of the binder ({Applicant} [0025]), because the binder types are substantially identical, they would also be expected to have similar glass transition temperatures.

At the time of the invention, it would have been obvious to use a sprayable fiber composition disclosed by O'Connell for a fabric taught by Nakanishi. The motivation would have been to form the sprayable fibers into a fabric having a contoured shape ({Nakanishi} [0002-0004]). O'Connell teaches a composition comprising similar fibers, binder, and diluent used in similar fields to Applicant's invention. Because Nakanishi is silent regarding the specific composition that renders the fibers "self-adhesive," it would have been obvious to one of ordinary skill to look for guidance in another sprayable

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composition comprising fibers, binder, and diluent for direction in making the fibers "self-adhesive." Thus, it would have been obvious to combine Nakanishi with O'Connell to obtain the composition for forming a fabric comprising specific constituent materials.

11. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (JP 05186949 A) in view of O'Connell, et al. {O'Connell} (EP 0 083 960 A1) or alternatively Laurent, et al. {Laurent} (EP 0 165 880 A1) as applied to Claim 1, either combination, in further view of Rosato (*Extruding Plastics*).

The prior art teaches various compositions for sprayable fiber layers and fabrics, but is silent regarding molecular weight of the binder and viscosity of the compositions.

Rosato teaches that plastic (polymer) properties are affected by molecular weight and nonplastic additives, and that viscosity increases with molecular weight ({Rosato} Pages 674 & 684). Thus, Rosato teaches molecular weight of polymers is a result-effective variable which effects viscosity. It would have been obvious to adjust molecular weight, and thus viscosity to obtain the properties for specific applications.

Conclusion

Any inquiry concerning this communication should be directed to SHAWN R. HUTCHINSON whose telephone number is (571)270-1546. The examiner can normally be reached on 7 AM to 5 PM, M-H.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Shawn R. Hutchinson/
Examiner, Art Unit 1794

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794